

I CLAIM  
Patent Claims

1. Scaffold coupling element for tubular scaffold elements (2) featuring two half braces (3, 4) which can be attached around the scaffold element (2) and pivot around a bolt (5). A closing element (6) tightens the braces (3, 4) and connects them with an additional brace (7) or a pair of braces which hold a second scaffold element. The closing element (6) consists of T-head bolts (10) which are held by bell-shaped projecting parts (11) limiting the pivotal motion of the T-heads (12). The shaft (13) with the thread (14) and the nut (15) fit into the fork-shaped, free end piece (16) of the corresponding brace (7) which functions as a closing mechanism (8),

**characterized by the fact**

that the T-head (12) of the T-head bolts (10) is designed to fit the bell (26) of the projecting parts (11) and by adding contact surfaces (27) to avoid jamming inside the bell (27) or turning during the tightening of the bracing elements (6) while allowing a pivotal motion.

2. Scaffold coupling element according to claim 1,  
**characterized by the fact**

that the T-head (12) is shaped like a wedge and that it fits the bell (26) and also features shaped parts (20, 21, 22, 24) with contact surfaces (27) and that the shaft also features contact surfaces (28) which altogether avoid a turning motion inside the bell (26).

*Q*  
*Q*

3. Scaffold coupling according to <sup>claim 1</sup> ~~one of the~~ aforementioned claims,  
**characterized by the fact**  
that the shaped parts (20, 21) are fit to correspond to the free ends of the T-head (17, 18) or to shape those ends.

*Q*  
*Q*

4. Scaffold coupling according to <sup>claim 1</sup> ~~one of the~~ aforementioned claims,  
**characterized by the fact** that the free ends of the T-head (17, 18) are beveled towards the shaft (13) and form a flat surface.

5. Scaffold coupling according to claim 4,  
**characterized by the fact**  
that the free ends of the T-head (17, 18) feature a short bevel (38) at the back of the T (23) pointing away from the shaft (13), then a short vertical bevel (39) and finally a longitudinal bevel (40) pointing towards the shaft (13).

*Q*  
*Q*

6. Scaffold coupling according to <sup>claim 1</sup> ~~one of the~~ aforementioned claims,  
**characterized by the fact**  
the shaft (13) is shaped to feature contact surfaces (24) where it attaches to the head (29).

*Q*  
*Q*

7. Scaffold coupling according to <sup>claim 1</sup> ~~one of the~~ aforementioned claims,  
**characterized by the fact**  
that the shaft (13) in its base (29) features vertical contact surfaces (28) such as the free ends of the T-heads

(17, 18). The contact surfaces (28) would be located vertically towards the longitudinal extension of the T-head (12) or the shaft (13).

8. Scaffold coupling according to claim 5, **characterized by the fact** that the contact surfaces (28) have limiting edges (42, 43) that are specially formed as bevels (44, 45) to become wider towards the thread (14).

9. Scaffold coupling according to <sup>Claim 1</sup> ~~one of the~~ ~~aforementioned claims,~~

**characterized by the fact**

that the contact surfaces (27, 28) at the free ends of the T-head (17, 18) and at the base (29) of the shaft (13) are specially shaped

10. Scaffold coupling according to <sup>Claim 1</sup> ~~one of the~~ ~~aforementioned claims,~~

**characterized by the fact**

that the contact surfaces (28) in the base (29) of the shaft (13) reach all the way to the fork-shaped free end piece (16) of the closing mechanism (8) when completely inserted.

11. Scaffold coupling according to <sup>Claim 1</sup> ~~one of the~~ ~~aforementioned claims,~~

**characterized by the fact**

that the free end pieces of the T-heads (17, 18) have slightly flattened supporting surfaces (32) on the side facing the bell (26).

*a*  
*a*

12. Scaffold coupling according to ~~one of the~~  
*~*  
~~aforementioned claims,~~

**characterized by the fact**

that the free end pieces of the T-heads (17, 18) on one hand  
and the bell (26) of the projecting parts (11) on the other  
hand would be shaped to correspond to each other and  
preferably feature corresponding contact and supporting  
surfaces (27, 28, 32, 33).

*claim 1*  
13. Scaffold coupling according to ~~one of the~~  
*~*  
~~aforementioned claims,~~

**characterized by the fact**

that the end pieces of the T-head (17, 18) feature a glide  
enhancing coating, preferably in the area of the contact and  
support surfaces (27, 28, 32).

*claim 1*  
14. Scaffold coupling according to ~~one of the~~  
*~*  
~~aforementioned claims,~~

**characterized by the fact**

that the ends of the T-heads (17, 18) or the entire T-head  
bolts (10) are made from a softer material than the material  
of the half braces.

*claim 1*  
15. Scaffold coupling according to ~~one of the~~  
*~*  
~~aforementioned claims,~~

**characterized by the fact**

that there is an indentation (48) on the back of the T-head  
(23) which is set to correspond with the enclosed scaffold  
element (2).

16. Scaffold coupling according to claim 7,  
**characterized by the fact**  
that an additional contact surface (30) is intended similar to the contact surface (28) but which expands in a V-shape in the area of the shaft (13) up to the middle of the T-head (12).

17. Scaffold coupling according to claim 1,  
**characterized by the fact**  
that the bell (26) of the projecting parts (11) in its lowest point (55) is fit for the T-head (15) and equipped with contact surfaces (27') to that a turning or jamming of the T-head bolt (10) during the tightening of the bracing element (6) can be prevented.

18. Scaffold coupling according to claim 17,  
**characterized by the fact**  
that the contact and support surfaces (27', 28', 32') are shaped to enclose the ends of the T-head (17, 18) and the arched surfaces (56) in between.

19. Scaffold coupling according to <sup>Claim 1</sup> ~~one of the~~  
~~aforementioned claims,~~  
**characterized by the fact**  
that the bell (26) to feature contact surfaces (27', 28', 32') just shortly prior to the lowest point in the bell (55) while the corresponding base (58) relates to the thickness of the T-head (12).

*Act B1*